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data!**Data Description**[RIS](#) | [BIBTeX](#)

Citation: Ronski, S; Budéus, G (2007): CTD profiles of physical oceanography during Polarstern Leg ARK-XVIII/1. doi:10.1594/PANGAEA.603997, *Supplement to: Ronski, Stephanie; Budéus, Gereon (2005): Time series of winter convection in the Greenland Sea. Journal of Geophysical Research, 110, C04015, doi:10.1029/2004JC002318*

Abstract: This set of data is part of a long term campaign to assess the recent hydrographic changes in the Greenland Sea and their causes. A zonal transect across the Greenland Gyre is performed annually since 1993. It extends from the Greenland shelf to that of the Barents Sea (Bear Island) in order to include the important rim water masses and to determine their influence on the waters in the central gyre. Station spacing is particularly small (10 nautical miles as the standard station distance but with closer spacing at the fronts) to resolve the patchy exchange structure between the rims and the gyre centre.

During the early 90s the basin wide hydrographic structure changed from the previous huge cold water dome to a pronounced two layer structure with a stable interface between the two layers. This interface descends with time: from a depth of about 900 m in 1993 to 1800 m in 2003. It limits winter convection effectively, so that nowadays the deeper layer is hardly ventilated at all. The volume decrease of the deeper layer requires an export of its waters. At the same time, exchanges with the deep Arctic outflow modify its properties prominently. The upper layer's development is complex and depends on numerous processes such as Atlantic Water import into the gyre or different types of winter convection. The interface itself shows remarkably constant properties.

Consistent equipment has been used since 1994, and the same sensors have been used for most cruises.

Project(s): [Physical Oceanography @ AWI](#) (AWI_PhyOce)

Coverage: *West:* -38.1309 * *East:* 17.1043 * *South:* 61.5295 * *North:* 75.1186

Date/Time Start: 2002-07-02T05:43:00 * **Date/Time End:** 2002-07-29T01:52:00

Size: 92 datasets

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[Download ZIP file containing all datasets as tab-delimited text](#) (use the following character encoding:

ISO-8859-1: ISO Western (PANGAEA default)	
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Datasets listed in this Collection

- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/004-1. doi:10.1594/PANGAEA.603329
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/012-1. doi:10.1594/PANGAEA.603903
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/012-4. doi:10.1594/PANGAEA.603904
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- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/091-1. doi:10.1594/PANGAEA.603945
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/092-1. doi:10.1594/PANGAEA.603946
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/093-1. doi:10.1594/PANGAEA.603947
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/094-1. doi:10.1594/PANGAEA.603948
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/095-1. doi:10.1594/PANGAEA.603949
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/096-1. doi:10.1594/PANGAEA.603950
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- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/098-1. doi:10.1594/PANGAEA.603952
- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/099-1. doi:10.1594/PANGAEA.603953
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- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/101-1. doi:10.1594/PANGAEA.603955
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- **Budéus, G (2007):** Physical oceanography during cruise ARK-XVIII/1 at CTD station PS62/130-1. doi:10.1594/PANGAEA.603996

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